Meeting Report

Acupuncture powered by energy techniques—22nd International Symposium on Acupuncture & Electro-Therapeutics

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General Organization

The 22nd International Symposium on Acupuncture and Electro-Therapeutics is the annual meeting and the main scientific event of research and teaching activity of the International College of Acupuncture & Electro-Therapeutics Research. The meeting is organized by Professor Yoshiaki Omura, Founder and Director of the College, Director of Medical Research in the Heart Disease Research Foundation. The Symposium is supported by the International College of Acupuncture & Electro-Therapeutics Research, by its official journal published by Cognizant Communication Corporation and by the Heart Disease Research Foundation.

The International College of Acupuncture & Electro-Therapeutics Research is a non-profit international medical society dedicated to scientific investigation and to education of physicians and other health care professionals on the latest research findings and practical methods in acupuncture and related techniques.

Scientific presentations at 22nd International Symposium on Acupuncture & Electro-Therapeutics addressed a multitude of topics relevant to physicians and scientists interested in acupuncture and related techniques. Presentations on advances in acupuncture research using the methods of basic science included the classical pharmacological experimental approach, structural and ultra-structural histological methods followed by clinical reports on the evaluation and treatment of a wide variety of diseases using acupuncture.

The Symposium was focused primarily on body acupuncture according to the traditional Chinese

For reprints and all correspondence: Taras I. Usichenko, MD, Department of Anesthesiology and Intensive Care Medicine, Ernst Moritz Arndt University, Greifswald, Germany. Tel: +49 3834 865803; Fax: +49 3834 865802; E-mail: taras@uni-greifswald.de meridian system, ear acupuncture and diagnostic techniques combining Traditional Chinese Medicine (TCM) concepts with the modern scientific approach.

The program consisted of various types of presentations: lectures, workshops, live- and video-presentations of patients, and live demonstrations of diagnostic and treatment techniques.

The 4-day Symposium attracted researchers from Australia, Brazil, Canada, China, Germany, Japan, Korea, Russia, Serbia, Tibet, Turkey and USA. The intensive program was scheduled from 09:00 a.m. until 10:00 p.m. every day.

Scientific Reports

Acupuncture and Electrotherapeutic Techniques

Xiao-Ding Cao, Director of Institute for Acupuncture Research (WHO Collaborating Center for Traditional Medicine) and Chief of National Key Laboratory of Medical Neurobiology at Shanghai Medical College of Fudan University (former Shanghai Medical University) China, reported extensive data on the scientific basis of acupuncture and acupuncture treatment, reviewing neuroanatomical and neurochemical developments in the People's Republic of China (with special emphasis on the effect of electroacupuncture on acute post-operative and neuropathic pain). Dr Cao presented the results of experimental animal studies on analgesic mechanisms of acupuncture and electroacupuncture, which were performed using standard physiological methods of pharmacological blockade and denervation. The same design was applied to investigate the effects of electro-acupuncture on cerebral ischemia in experimental animals. These results were later used in well-conducted human

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therapeutic trials, that showed the benefits of acupuncture and electroacupuncture in patients after stroke. Further, Dr Cao clearly showed that the effect of electroacupuncture combined with drugs, enhances the positive action of drugs while diminishing their unwanted side effects.

Extraordinarily interesting research describing new histological and ultra-structural findings related to the system of acupuncture meridians was presented by Jung Sun Yoo from Seoul, Korea. She and her colleagues from Biomedical Physics Laboratory, School of Physics of Seoul National University have analyzed the detailed structure of so called Bonghan ducts, claimed to be the part of the acupuncture meridian (1). The system of threadlike ducts (Bonghan ducts) was studied using the high voltage transmission electron microscopy, which clearly showed the characteristic cribrous structure of this tissue with channels for circulation.

Agatha Colbert from Helfgott Research Institute at the National College of Natural Medicine, Portland, Oregon, USA, presented new device for measuring skin impedance at acupuncture points. After the extensive literature search and comparison of several commercially available systems for skin impedance measurement the researcher group around Dr Colbert developed the prototype single-channel device, able to record skin resistance and capacitance for extended time periods. The results of the tests in four healthy volunteers showed high reproducibility of measurements. The aim of their follow-up study is the development of a multi-channel system that will measure skin impedance continuously over 24 h at multiple sites simultaneously.

Fernando Cesar Dotta de Barros, Ear, Nose and Throat Hospital at Sao Paulo, Brazil, presented the impressive observational study (including video presentations of single cases) on the clinical application of 'Ion Pumping Acupuncture Technique' (IPAT), introduced in clinical practice of acupuncture by Dr Yoshio Manaka in the early 40's (2). This technique has been applied in the treatment of patients with intractable pain at the Emergency Service in Acupuncture at the Federal University of São Paulo since 1998. Treating over 2500 patients per month, with focus on instant pain relief using a variety of techniques such as acupuncture of the key points, extraordinary channels, auricular acupuncture, craniopuncture and so on; the IPAT was found to be beneficial, especially in cases where conventional acupuncture was ineffective.

Taras Usichenko, Anesthesiology and Intensive Care Medicine Department, University of Greifswald, Germany, presented results of a randomized, sham acupuncture-controlled study on intraoperative analgesic effects of auricular acupuncture (AA). The authors analyzed the intraoperative analgesic requirement in 57 patients during total hip arthroplasty (THA) performed under general anesthesia with previous

application of permanent AA needles. AA was safe and effective in reducing intraoperative fentanyl requirement for analgesia during THA in comparison with control group (P = 0.005).

Energetic Techniques

Dr Omura reported on the role of asbestos as a cause of chronic debilitating diseases, various malignancies, cardiovascular diseases, Alzheimer's disease and chronic intractable pain syndromes. Using extensive observational data, Dr Omura suggested that asbestos might have a much stronger pathological potential in the development of such diseases as malignant lung tumors (including small cell carcinoma, adenocarcinoma and mesothelioma), brain tumors (i.e. astrocytoma and glioblastoma multiforme), chronic intractable pain syndromes including fibromvalgia and some cardio-vascular pathology (3). He compared the conventional method of asbestos detection using the transmission type electron microscope with the Bi-Digital O-Ring Test (BDORT) examination, which is inexpensive and easily performed in clinical routine. Dr Omura proposed prevention measures and ways to eliminate asbestos from the human organism.

Yasuhiro Shimotsuura, Shimotsuura Clinic, Kurume City, Fukuoka, Japan, presented exciting results of an observational case series study on the early prediction of cancer cases using the BDORT. The authors carefully described five cases where the early cancer diagnosis using BDORT predicted the localization of cancer 5–10 years before the cancer was detected using the common mainstream medicine diagnostic procedures.

Department of Dunjic, Gynecological Endocrinology, School of Medicine Pristina, University of Belgrade, Yugoslavia, reported the intriguing clinical data where BDORT was applied for prenatal fetal gender determination and for diagnostics of pregnancy-related disorders of glucose metabolism. The researchers found that the BDORT had 95% accuracy of gender prediction in 149 cases and revealed all patients (8 out of 128 pregnant women) with glucose intolerance, later confirmed by standard oral glucose tolerance test. The same research group reported on the new approach in diagnostics and treatment of autoimmune Hashimoto thyroiditis (HT) in 292 patients using the BDORT and selective drug uptake enhancement method (SDUEM). The accuracy of HT diagnostic using the non-invasive BDORT ranged 90-95% referring to standard immunological diagnostic techniques. The authors noted that BDORT helped to reveal the possible etiology of HT, which improved the treatment effectiveness. The application of SDUEM led to the normalization of thyroid gland antibody levels in almost 90% of patients.

Muneyoshi Oka, Molecular Resonance Research Laboratory, Oita Oka Hospital, Japan, presented data on the coincidence of health hazards and an increased rate of endogenous depression. The main idea of his presentation is that the environmental pollutants (e.g. formaldehyde and dioxin) in rainwater markedly decrease cerebral neurotransmitters (e.g. dopamine, serotonin and GABA), which may contribute to the pathogenesis of depression.

Kemal Nuri Ozerkan, School of Physical Education and Sports, Istanbul University, Turkey, reported on new approaches to acupuncture diagnostics and treatment using the BDORT, applied to the so-called 'jingwell' acupuncture points on the tips of fingers and toes. He stressed that using the BDORT as a diagnostic tool helps precisely identify the distortion in the system of acupuncture meridians, to find more efficient acupuncture points for treatment of energy distortion in meridian system and to find the optimal time for this therapy.

Dr Usichenko presented a systematic review on pain relief when low-intensity electromagnetic millimeter waves (MW) are applied to acupuncture points. The evidence from 12 clinical trials (eight of them randomized) strongly suggests that the application of electromagnetic millimeter waves in the frequency range 30-70 GHz to acupuncture points might have alalgesic effects. The model of an 'electromagnetic frame' of the human body based on the principles of quantum physics and data from embryological, physiological and clinical research allows us to interpret the nature of acupuncture meridians and to explain the mechanism of MW applied to acupuncture points. Rigorous large-scale randomized controlled trials on the effectiveness of this non-invasive therapeutic technique are necessary (4). The most intriguing question is to evaluate the role of the exposure site in relation to the topography of the acupuncture meridian system.

Narayan G. Patel, Ayurveda Center in Wilmington, Delaware, USA, reported on the implementation of energetic theories and techniques of ancient Tibetan medicine into modern health care. His lecture was followed by a demonstration of non-invasive diagnostics using the method and equipment developed by Reinhard Voll in the early 1950s in Germany (5). Using volunteers from the audience, Dr Patel vividly demonstrated ways to combine the ancient theories and experience with modern methods of CAM applied to modern health care.

Avracham Henoch from Department of Family Medicine, New York Presbyterian Hospital, reviewed the historical development and clinical application of the Bi-Digital O-Ring Test and presented an updated

literature review about the role of infection in the development of cancer.

The panel discussion on acupuncture training and licensing in various countries took place at the end of Symposium. Moderated by Dr Omura, this exchange of information among the representatives from different countries of the world contributed to a better understanding of the legislative situation of acupuncture in Brazil, Canada, Germany, Great Britain, Japan, Korea, Russia, Serbia, Turkey, Ukraine and some other counties. The Symposium ended with a planning meeting of the Council of the International College of Acupuncture & Electro-Therapeutics.

General Impression

The audience of the 22nd International Symposium on Acupuncture & Electro-Therapeutics consisted primarily of experts in the field (researchers and advanced clinicians). In context of the various presentations and during breakout sessions, participants very much appreciated opportunities to exchange ideas about their work and recent clinical and scientific advances in acupuncture diagnostic and therapeutic techniques, with particular emphasis on BDORT. The 22nd International Symposium on Acupuncture & Electro-Therapeutics was a successful step on the path to integrating science into the fields of acupuncture and energy therapies. We believe that the application of scientifically validated energetic CAM methods will enhance the diagnostic and therapeutic potential of acupuncture and substantially improve patient care (6).

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